



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,661	08/28/2001	Luis Gravano	0026-0016	4877

26615 7590 03/01/2004

HARRITY & SNYDER, LLP
11240 WAPLES MILL ROAD
SUITE 300
FAIRFAX, VA 22030

EXAMINER

VEILLARD, JACQUES

ART UNIT	PAPER NUMBER
----------	--------------

2175

DATE MAILED: 03/01/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary

Application No.

09/939,661

Applicant(s)

GRAVANO ET AL.

Examiner

Jacques Veillard

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2 & 4/8/01 & 2/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the Applicant's communication filed on 8/28/2001.
2. Claims 1-25 are pending and presented for examination.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 8/28/2001 (Paper No.2) and 2/25/2003 (Paper No. 4) are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, and 10-15, 20, 21, and 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Chan et al. (U. S. Pat. No. 6,604,101, hereinafter Chan).

As per claims 1, 14 and 20, Chan discloses a method and system for performing translingual of query translation (See the Title and the abstract). Similarly, the method and system disclosed by Chan comprising: receiving a search query that includes terms in a first language (See Fig.2 in conjunction with component 118 and corresponding text, Fig.3, and col.7, lines 1-27); determining possible translations of the terms of the search query into a second

Art Unit: 2175

language (See col.6, lines 1-23); locating documents in the first language that contain references that match the terms of the search query and identify documents in the second language (See col.6, lines 24-67, "Chan achieves this limitation by providing a post search translation"); and disambiguating among the possible translations of the terms of the search query using the identified documents to identify one of the possible translations as a likely translation of the search query (See col.4, lines 15-29, "Chan achieves this limitation by providing method and systems that dialectally standardized keywords or query to a more commonly known or used term").

As per claims 10, 15, and 23, the claims have substantially the same limitations as claims 1, 14, and 20. These limitations have been already addressed in the rejection of these mentioned claims. Therefore, they are rejected on similar ground corresponding to the arguments given for the rejected claims 1, 14, and 20 above.

As per claim 2, Chan discloses the claimed limitation, wherein the receiving a search query includes: presenting a graphical user interface to a user (See Fig.1 in conjunction with component 115, and col.6, lines 16-17) and receiving the terms of the search query in the first language from the user via the graphical user interface (See Fig.3, and col.7, lines 1-28).

As per claims 3 and 4, Chan discloses the claimed limitation, wherein the determining possible translations include: using a dictionary to identify the possible translations of the terms into the second language, which includes one or more bilingual machine-readable dictionaries by

Art Unit: 2175

providing a translator which is primarily incorporated bilingual machine-readable dictionaries (See Fig.1 in conjunction with component 110).

As per claim5, Chan discloses the claimed limitation , wherein the locating documents in the first language includes: performing a search of a database of documents using the search query, and identifying one or more of the documents in the database, each of the one or more documents containing at least one reference that matches the search query and identifies a document in the second language(See Fig.3 and corresponding text namely col.7, lines 1-27).

As per claim 11, Chan discloses a system for translating search queries (See the Title and the abstract). In particular, Chan discloses a search engine (Fig.1, component 112) which in turn is connected to a web/Internet (Fig.1 component 114), the web/Internet is known to have databases, since Chan uses the web/Internet, it is apparent that a database must be incorporated to store documents in a plurality of languages; a search engine (Fig.1 in conjunction with component 112) configured to: receive a search query that includes terms in a first language (See Fig.2 in conjunction with component 118 and corresponding text, Fig.3, and col.7, lines 1-27), and search the database to locate documents in the first language that contain references that match the terms of the search query and identify documents in a second language (See col.6, lines 1-23); and a query translation engine (See Fig.1 component 110) configured to: receive the search query, determine possible translations of the terms of the search query into the second language (See col.6, lines 24-67, "Chan achieves this limitation by providing a post search translation"), and disambiguate among the possible translations of the terms of the search query

Art Unit: 2175

using the identified documents in the second language to identify one of the possible translations as a likely translation of the search query (See col.4, lines 15-29, "Chan achieves this limitation by providing method and systems that dialectally standardized keywords or query to a more commonly known or used term").

As per claims 21 and 24, the claims have substantially the same limitations as claim 11. These limitations have been already addressed in the rejection of these mentioned claims. Therefore, they are rejected on similar ground corresponding to the arguments given for the rejected claim 11 above.

As per claim 12, Chan discloses the claimed limitation, wherein the database includes a plurality of documents distributed over a network (See Fig.1 and corresponding text)

As per claim 13, Chan discloses the claimed limitation, wherein the network is the Internet (See Fig.1 and component 114).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2175

7. Claim 6-9, 16-19, 22 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al.(U. S. Pat. No. 6,604,101, hereinafter Chan) in view of Liddy et al. (U. S. Pat. No. 6,006,221, hereinafter Liddy).

As per claims 18 and 19, Chan discloses a method and system for performing translanguag of query translation (See the Title and the abstract). Similarly, the method and system disclosed by Chanl, comprising: receiving a search query that includes one or more terms in a first language (See Fig.2 in conjunction with component 118 and corresponding text, Fig.3, and col.7, lines 1-27); performing a search of documents in the first language to locate one or more of the first language documents that contain anchor text that matches the search query and identifies one or more documents in a second language (See col.6, lines 1-23); determining possible translations of the terms of the search query into the second language (See col.6, lines 24-67, "Chan achieves this limitation by providing a post search translation"); ; identifying one of the possible translations as a correct translation of the search query based on the disambiguation (See col.4, lines 15-29, "Chan achieves this limitation by providing method and systems that dialectally standardized keywords or query to a more commonly known or used term"). Chan does not teach

using the identified second language documents as parallel corpora for disambiguation among the possible translations of the terms of the search query; and performing a search of second language documents using the correct translation of the search query.

However, Liddy teaches a multilingual document retrieval including a natural language query, in a desired one of a plurality of supported languages (See the abstract) including using the identified second language documents as parallel corpora for disambiguation among the

Art Unit: 2175

possible translations of the terms of the search query (See col.13, lines 4-17); and performing a search of second language documents using the correct translation of the search query (See the abstract lines 1-6, col.3, line 55 through col.4, line 13 and col.15, line 64 through col.16, line 10).

It would have been obvious to a person of ordinary skill in the art at the time the Applicant's invention was made to modify the teachings of Chan with the teachings of Liddy to include a multilingual retrieval system in order for user to retrieve documents from a database that includes documents in at least one other language of the plurality of supported languages without any knowledge of other language.

As per claims 22 and 25, the claims have substantially the same limitations as claims 18 and 19. These limitations have been already addressed in the rejection of these mentioned claims. Therefore, they are rejected on similar ground corresponding to the arguments given for the rejected claims 18 and 19 above.

As per claims 6 and 7, the combination of Chan and Liddy, as modified, teaches the claimed limitation, wherein the references include anchor text and text surrounding the anchor (See Liddy's col.11, line 65 through col.12, line 10, and lines 51-62).

As per claims 16 and 17, the claims have substantially the same limitations as claims 6 and 7. These limitations have been already addressed in the rejection of these mentioned claims. Therefore, they are rejected on similar ground corresponding to the arguments given for the rejected claims 6 and 7 above.

Art Unit: 2175

As per claim 8, the combination of Chan and Liddy, as modified, teaches the claimed limitation, wherein the disambiguating among the possible translations includes: using text of the identified documents as parallel corpora, and using a parallel corpora disambiguation technique to differentiate among the possible translations of the terms of the search query (See Liddy's col.13, lines 11-17).

As per claim 9, the combination of Chan and Liddy, as modified, teaches the claimed limitation, wherein the disambiguating among the possible translations includes: determining a frequency of co-occurrence of the possible translations in the identified documents (See Liddy's col.6, lines 48-62), and designating one of the possible translations with a highest frequency of co-occurrence as a correct translation (See Liddy's col.13, lines 4-11).

Other Prior Art Made Of Record

- | | | |
|----|-----------------|-------------------------------|
| 8. | McCarley | U. S. Pat. No. 6,349,276, |
| | Masuichi et al. | U. S. Pat. No. 6,321,189, |
| | Nosohara | U. S. Pat. No. 6,212,537, and |
| | Faisal | U. S. Pat. No. 6,094,652. |

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. **Any response to this action should be mail to:**

Art Unit: 2175

Commissioner of Patent and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 746-7239 (for formal communication intended for entry)

Or:

(703) 746-7240 (for informal of draft communications, please label


"PROPOSED" or "DRAFT")

Hand - delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington.

VA, Fourth Floor Lobby (Receptionist Telephone No. (703) 305-3900).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (703) 305-7094. The examiner can normally be reached Monday through Friday from 9:30 AM to 4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached on (703) 305-3830. The fax phone number for this group is (703) 308-5403.


CHARLES RONES
PRIMARY EXAMINER



Jacques Veillard
Patent Examiner TC 2100

February 24, 2004